US005305394A

United States Patent [19]

Tanaka

[11] Patent Number: 5,305,394

[45] Date of Patent: Apr. 19, 1994

[54] CHARACTER INPUTTING APPARATUS

[75] Inventor: **Hidekazu Tanaka**, Tokyo, Japan

[73] Assignee: **Sony Corporation**, Tokyo, Japan

[21] Appl. No.: **875,190**

[22] Filed: **Apr. 29, 1992**

[30] **Foreign Application Priority Data**

Apr. 30, 1991 [JP] Japan 3-126739
May 1, 1991 [JP] Japan 3-128349

[51] **Int. Cl.**[5] **G06K 9/00**
[52] **U.S. Cl.** **382/13**; 382/59
[58] **Field of Search** 382/13, 59, 3

[56] **References Cited**

U.S. PATENT DOCUMENTS

4,653,107	3/1987	Shojima et al.	382/13
4,654,873	3/1987	Fujisawa et al.	382/9
4,827,530	5/1989	Yamaguichi et al.	382/13
4,860,372	8/1989	Kuzunuki et al.	382/13
4,944,022	7/1990	Yasujima et al.	382/14

FOREIGN PATENT DOCUMENTS

0254561A2	1/1988	European Pat. Off.	G06F 3/02
0379336A3	7/1990	European Pat. Off.	G06F 3/033
3629104A1	3/1987	Fed. Rep. of Germany	G06F 3/033

OTHER PUBLICATIONS

Proceedings Tencon 87 IEEE Region 10 Conference, vol. 1, Aug. 25-28, 1987, Seoul, Korea, pp. 91-95; Y. T. Juang: 'On line recognition or handwritten Chinese characters: a syntactic-semantic approach'.

IEEE Micro, vol. 5, Oct. 1984, New York, USA pp. 36-43: W. Doster & R. Oed: 'Word Processing with On-line Script Recognition'.

Primary Examiner—Leo H. Boudreau
Attorney, Agent, or Firm—Charles P. Sammut

[57] **ABSTRACT**

An apparatus for recognizing handwritten trace and inputting document information is disclosed which comprises trace means for inputting handwritten characters, coordinate information detection means for detecting locus information provided by said trace means as coordinate information, a display superposed on said detection means for allowing an image displayed thereon to be recognized through said detection means, M character display frames to which said handwritten characters are successively input and in which results of recognition of the locus information are displayed substantially in a cyclic manner, a logical character frame disposed in the vicinity of said character display frame for temporarily displaying N (N>M) characters cyclically input from said character display frames, a writing page portion to which characters displayed in said logical character frame are finally transferred to be displayed thereon, and an operating portion provided within said logical character frame to be operated when M characters out of the characters, N in number at its maximum, displayed in said logical character frame are to be displayed in said character display frames.

7 Claims, 32 Drawing Sheets